

AMENDMENTS TO THE CLAIMS

Please add new Claims 40-51 as indicated below.

A complete listing of all claims and their current status is presented below.

1. (Original) An implant for treating glaucoma, said implant having a longitudinal implant axis, and comprising:

an outflow portion through which said longitudinal implant axis passes, said outflow portion shaped and sized to be:

(a) introduced into Schlemm's canal with said portion of said longitudinal implant axis at an angle to Schlemm's canal; and

(b) received within Schlemm's canal regardless of a rotational orientation of the outflow portion about said longitudinal implant axis during said introduction; and

an inflow portion configured to permit communication of fluid from the anterior chamber of the eye to the outflow portion.

2. (Original) An implant for treating glaucoma, comprising:

an outflow portion, sized and shaped to be received within Schlemm's canal, said outflow portion comprising:

an outflow portion base having an outflow opening; and

at least one standoff member disposed to space said outflow opening from a wall of Schlemm's canal, such that said outflow opening is unobstructed by said canal wall.

3. (Original) An implant for treating glaucoma, said implant having a longitudinal implant axis and comprising:

a first portion at a first end of said longitudinal implant axis, said first portion sized and configured to reside in Schlemm's canal, such that said first portion has a maximum dimension along a longitudinal axis of Schlemm's canal that is not

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substantially greater than a dimension of the first portion that runs perpendicular to both said longitudinal axis of Schlemm's canal and to said longitudinal implant axis; and

a second portion at a second end of said longitudinal implant axis, said second portion configured to provide fluid communication between the anterior chamber and said first portion.

4. (Original) An implant for treating glaucoma, comprising:
 - an outflow portion, sized and shaped to be received within Schlemm's canal;
 - an inflow portion in fluid communication with said outflow portion, the inflow portion configured to be disposed in the anterior chamber of the eye; and
 - a central portion extending between the inflow and outflow portions;
 - the outflow portion having a diameter that is no more than three times the diameter of the central portion.

5. (Original) An instrument for delivering implants for treating an ophthalmic condition, the instrument comprising:

an elongate body, said elongate body sized to be introduced into an eye through an incision in the eye;

a plurality of implants positioned in the elongate body; and

said elongate body further comprising an actuator that serially dispenses the implants from the elongate body for implanting in eye tissue.

6. (Original) The instrument of Claim 5, wherein the elongate body comprises a tube.

7. (Original) The instrument of Claim 5, wherein the implants are positioned end to end in the tube.

8. (Original) The instrument of Claim 5, wherein the body comprises a cutting member.

9. (Original) The instrument of Claim 5, wherein the body comprises a tube and the cutting member comprises an end of the tube.

10. (Original) The instrument of Claim 5, wherein the body comprises a tube and the cutting member comprises a trocar in the tube.

11. (Original) The instrument of Claim 10, wherein the implants have respective lumens and the trocar passes through the lumens.

12. (Original) The instrument of Claim 10, wherein the instrument dispenses the implants through a wall of Schlemm's canal, said trocar having a cutting edge sufficiently sharp to cut through said wall of Schlemm's canal, but not so sharp as to significantly damage a scleral wall of Schlemm's canal.

13. (Original) The instrument of Claim 1, wherein the actuator comprises a pusher member.

14. (Original) The instrument of Claim 1, wherein the actuator comprises a rod or a tube.

15. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location, without removing said instrument from the eye between said deliveries of said implants.

16. (Original) The method of Claim 15, further comprising determining said locations with reference to morphological data on collector channel locations.

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17. (Original) The method of Claim 15, wherein the incision is a superiorly located limbal incision.

18. (Original) The method of Claim 17, wherein the incision is between 10 o'clock and 2 o'clock.

19. (Original) The method of Claim 15, further comprising performing cataract surgery through said incision.

20. (Original) The method of Claim 15, further comprising determining said locations by imaging collector channel locations.

21. (Original) The method of Claim 15, wherein said implants are delivered through a trabecular meshwork of said eye.

22. (Original) The method of Claim 15, wherein said locations are angularly spaced along Schlemm's canal by at least 20 degrees.

23. (Original) The method of Claim 15, wherein the first and second locations are substantially at collector channels.

24. (Original) The method of Claim 15, wherein said implants have different flow characteristics.

25. (Original) The method of Claim 15, wherein one of said first and second locations is nasal and the other of said first and second locations is temporal.

26. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said locations are determined from morphological data on collector channel locations.

27. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said locations are determined by imaging collector channel locations.

28. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said locations are angularly spaced along Schlemm's canal by at least 20 degrees.

29. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

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utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein the first and second locations are substantially at collector channels.

30. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said implants have different flow characteristics.

31. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant into the posterior segment of the eye; and

utilizing said instrument to deliver a second implant into the posterior segment of the eye at a second location, without removing said instrument from the eye between said deliveries of said implants.

32. (Original) A method of treating an eye condition, the method comprising:

serially dispensing a plurality of preloaded implants from an instrument into eye tissue at a respective plurality of locations within the eye.

33. (Previously presented) A method of treating an eye condition, the method comprising:

dispensing a plurality of preloaded implants from an instrument into eye tissue at a respective plurality of locations within the eye,

wherein at least one of said respective plurality of locations is at a collector channel.

34. (Previously presented) The method of Claim 33, wherein said dispensing is serial.

35. (Previously presented) The method of Claim 15, wherein at least one of said first and second locations is at a collector channel.

36. (Previously presented) The method of Claim 26, wherein at least one of said first and second locations is at a collector channel.

37. (Previously presented) The method of Claim 27, wherein at least one of said first and second locations is at a collector channel.

38. (Previously presented) The method of Claim 28, wherein at least one of said first and second locations is at a collector channel.

39. (Previously presented) The method of Claim 30, wherein at least one of said first and second locations is at a collector channel.

40. (New) A method of treating glaucoma, comprising:

acquiring Schlemm's canal location information by identifying the location of a portion of Schlemm's canal of an eye without surgically exposing said portion of Schlemm's canal;

introducing, based on said Schlemm's canal location information, an implant through an exterior surface of the eye, such that an inlet portion of the implant is in fluid communication with the anterior chamber of the eye and an outlet portion of the implant resides at least partially in Schlemm's canal.

41. (New) The method of Claim 40, wherein said acquiring of said Schlemm's canal location information comprises imaging.

42. (New) The method of Claim 41, wherein said imaging is performed by ultrasound biomicroscopy.

43. (New) The method of Claim 41, wherein said imaging is performed by optical coherence tomography.

44. (New) The implant of Claim 1, said outflow portion having at least two outflow openings in fluid communication with the inflow portion.

45. (New) The implant of Claim 1, wherein said outflow portion has a distal end that is blunt.

46. (New) The implant of Claim 2, wherein said outflow portion has a distal end that is blunt.

47. (New) The implant of Claim 2, wherein said outflow portion has at least two outflow openings.

48. (New) The implant of Claim 3, wherein said first portion has a distal end that is blunt.

49. (New) The implant of Claim 3, wherein said first portion has at least two outflow openings in fluid communication with said second portion.

50. (New) The implant of Claim 4, wherein said outflow portion has a distal end that is blunt.

51. (New) The implant of Claim 4, wherein said outflow portion has at least two outflow openings.